AMENDMENTS TO THE CLAIMS

1.   (Currently amended) A device for selecting an operating mode of an integrated circuit, comprising:

a non-volatile memory programmable after manufacturing, having, prior to any programming an initial content;

means for storing a first signature representative of the initial content of the non-volatile memory;

means for calculating a second signature representative of a current content of the non-volatile memory; and

means for evaluating a difference between the first and second signatures and for deactivating an operating mode selection signal when the difference is greater than a predetermined threshold.

2.   (Currently amended) The ~~selection~~ device for selecting an operating mode of claim 1, wherein:

the memory is divided into sub-areas that can each take any one of a plurality of values;

the first signature comprises a number of initial occurrences of each of the plurality of values in said sub-areas; and

the second signature comprises a number of current occurrences of each of the plurality of values in said sub-areas.

3.   (Currently amended) The ~~selection~~ device for selecting an operating mode of claim 2, wherein the means for evaluating the difference between the first and second signatures calculates the differences between the number of respective occurrences of each of the plurality of values in the first and second signatures and sums the absolute values of the differences.

4.   (Currently amended) An integrated circuit comprising ~~a selection~~ the device for selecting an operating mode according to claim 1, operating in a first mode as long as the operating mode selection signal is active, and in a second mode otherwise.

5. (Currently amended) The integrated circuit of claim 4, wherein at least part of the non-volatile memory of the selection device is a memory or a memory area which can only be written into in the first operating mode.

6. (Original) The integrated circuit of claim 4, wherein the second signature is calculated each time the integrated circuit is powered on.

7. (Currently amended) A method for selecting an operating mode of an integrated circuit comprising a non-volatile memory programmable after manufacturing, comprising the steps of:

- upon manufacturing of the integrated circuit, storing a first signature representative of an initial content, prior to any programming, of the memory in a storage means; and

- after manufacturing of the integrated circuit, controllably calculating a second signature representative of a current content of the non-volatile memory, evaluating a difference between the first and second signatures, and deactivating an operating mode selection signal when the difference is greater than a predetermined threshold.

8. (Currently amended) A device for selecting an operating mode of an integrated circuit, comprising:

a non-volatile memory having an initial content after manufacturing;

a storage device for storing a first signature representative of the initial content of the non-volatile memory;

a calculation circuit configured to calculate a second signature representative of a current content of the non-volatile memory; and

a control circuit configured to evaluate a difference between the first and second signatures and to deactivate an operating mode selection signal with when the difference is greater than a predetermined threshold.

9. (Original) A selection device as defined in claim 8, wherein the operating mode selection signal is deactivated in response to writing a predetermined value into the non-volatile memory.

10.   (Original) A selection device as defined in claim 8, wherein the non-volatile memory comprises a ferromagnetic memory.

11.   (Original) A selection device as defined in claim 8, wherein the first signature is based on a defined sub-area of the non-volatile memory.

12.   (Original) A selection device as defined in claim 8, wherein the calculation circuit is configured to calculate the second signature each time the integrated circuit is powered on.

13.   (Original) A selection device as defined in claim 8, wherein writing in the non-volatile memory is prevented when the operating mode selection signal is deactivated.

14.   (Original) A selection device as defined in claim 8, wherein the non-volatile memory is divided into sub-areas that can each take any of a plurality of values, the first signature comprises a number of initial occurrences of each of the plurality of values in the sub-areas, and the second signature comprises a number of current occurrences of each of the plurality of values in the sub-areas.

15.   (Currently amended) A The selection device as defined in claim 14, wherein the control circuit is configured to calculate the differences between the number of initial occurrences and the number of current occurrences of each of the plurality of values in the first and second signatures and to sum the absolute values of the differences to obtain a value for comparison with the predetermined threshold.

16.   (Currently amended) An integrated circuit comprising:
a non-volatile memory having an initial content after manufacturing;
a mode select device for selecting an operating mode of an the integrated circuit, comprising:

a storage device for storing a first signature representative of the initial content of the non-volatile memory;

a calculation circuit configured to calculate a second signature representative of a current content of the non-volatile memory; and

a control circuit configured to evaluate a difference between the first and second signatures and to deactivate an operating mode selection signal when the difference is greater than a predetermined threshold; and

a functional block configured to operate in different operating modes according to a state of the operating mode selection signal.

17.   (Currently amended) An The integrated circuit as defined in claim 16, wherein the functional block is configured to operate in a reserved mode in response to an active state of the operating mode selection signal and to operate in a user mode in response to a deactivated state of the operating mode selection signal.

18.   (Currently amended) An The integrated circuit as defined in claim 16, wherein the non-volatile memory is located in the selection device.

19.   (Currently amended) An The integrated circuit as defined in claim 16, wherein the non-volatile memory is located in the functional block.

20.   (Currently amended) An The integrated circuit as defined in claim 19, wherein the initial content of the non-volatile memory is based on a defined sub-area of the non-volatile memory.

21.   (Currently amended) An The integrated circuit as defined in claim 16, wherein the functional block is configured to prevent writing in the non-volatile memory when the operating mode selection signal is deactivated.

22.   (Original) A method for selecting an operating mode of an integrated circuit, comprising:

providing on the integrated circuit a non-volatile memory having an initial content after manufacturing;

storing a first signature representative of the initial content of the non-volatile memory;

calculating a second signature representative of a current content of the non-volatile memory; and

evaluating a difference between the first and second signatures and deactivating an operating mode selection signal when the difference is greater than a predetermined threshold.

23.   (Currently amended) A-The method as defined in claim 22, further comprising writing a predetermined value into the non-volatile memory to cause the operating mode selection signal to be deactivated.

24.   (Currently amended) A-The method as defined in claim 22, wherein the second signature is calculated each time the integrated circuit is powered on.

25.   (Currently amended) A-The method as defined in claim 22, wherein the non-volatile memory is divided into sub-areas that can each take any of a plurality of values, the first signature comprises a number of initial occurrences of the plurality of values and the second signature comprises a number of current occurrences of each of the plurality of values, wherein evaluating the difference between the first and second signatures comprises calculating the differences between the number of initial occurrences and the number of current occurrences of each of the plurality of values in the first and second signatures and summing the absolute values of the differences to obtain a value for comparison with the predetermined threshold.

26.   (Currently amended) A-The method as defined in claim 23, wherein writing in the non-volatile memory is prevented when the operating mode selection signal is deactivated.